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APPLICATION NO	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09 657,179	09 07 2000	Bengt Svensson	3670-18	1904

7590 03 25 2002

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[REDACTED] EXAMINER

LEE, BENNY T

ART UNIT	PAPER NUMBER
2817	

DATE MAILED: 03 25 2002

Please find below and/or attached an Office communication concerning this application or proceeding.



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SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.

EXAMINER

ART UNIT PAPER NUMBER

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DATE MAILED:

This is a communication from the examiner in charge of your application.

COMMISSIONER OF PATENTS AND TRADEMARKS

Application has been examined  Responsive to communication filed on \_\_\_\_\_  This action is made final.  
A statutory period for response to this action is set to expire Three (3) month(s), \_\_\_\_\_ days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133.

THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

Notice of References Cited by Examiner, PTO-892. 2.  Notice re Patent Drawing, PTO-948.  
Notice of Art Cited by Applicant, PTO-1449. 4.  Notice of Informal Patent Application, Form PTO-152  
Information on How to Effect Drawing Changes, PTO-1474. 6.  \_\_\_\_\_

SUMMARY OF ACTION

Claims 1 - 14 are pending in the application.

Of the above, claims \_\_\_\_\_ are withdrawn from consideration.

Claims \_\_\_\_\_ have been cancelled.

Claims \_\_\_\_\_ are allowed.

Claims 1 - 14 are rejected.

Claims \_\_\_\_\_ are objected to.

Claims \_\_\_\_\_ are subject to restriction or election requirement.

This application has been filed with informal drawings which are acceptable for examination purposes until such time as allowable subject matter is indicated.

Allowable subject matter having been indicated, formal drawings are required in response to this Office action.

No corrected or substitute drawings have been received on \_\_\_\_\_. These drawings are  acceptable;  not acceptable (see explanation).

No  proposed drawing correction and/or the  proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_, has (have) been  approved by the examiner,  disapproved by the examiner (see explanation).

No proposed drawing correction, filed \_\_\_\_\_, has been  approved,  disapproved (see explanation). However, the Patent and Trademark Office no longer makes drawing changes. It is now applicant's responsibility to ensure that the drawings are corrected. Corrections MUST be effected in accordance with the instructions set forth on the attached letter "INFORMATION ON HOW TO EFFECT DRAWING CHANGES", PTO-1474.

Acknowledgment is made of the claim for priority under 35 U.S.C. 119. The certified copy has  been received  not been received

been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_.

As this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.

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The disclosure is objected to because of the following informalities: Page 1, line 11, note that, "for example" should be deleted as being unnecessary; line 30, note that "the ~~said~~" should be rephrased as --this--. Page 3, line 15, note that "said" should be rewritten as --such-- for a proper characterization; line 22, note that "DESCRIPTION" should correctly be --SUMMARY--. Page 3, line 5, note that "said" should be deleted as being redundant; line 32, note that --BRIEF-- should precede "DESCRIPTION". Page 4, line 16, note that --DETAIL DESCRIPTION OF THE --should precede "PREFERRED". Page 5, line 9, note that "115-122" should be rewritten as --115, 116, 117, 118, 119, 120, 121, 122-- such as to be consistent with the labeling in Figure 1. Page 7, line 15 and page 8, line 2, note that "second layer 335" does not appear consistent with "distribution network 335". Page 8, lines 18, 28, note that "415-422" should be rewritten as --415, 416, 417, 418, 419, 420, 421, 422-- such as to be consistent with the labeling in figures 4 and 5, respectively. The disclosure is objected to because of the following informalities: The following reference labels appearing in the corresponding figures need explicit description relative to the specification description of such figures: fig. 1 (123, 127, 128, 129, 130); fig. 2, all labeled features therein; fig. 4, all reference labels except (410, 415-418, 421); fig. 5, all reference labels except (415-417). The abstract of the disclosure is objected to because "(fig. 1)" should be deleted as being unnecessary. Correction is required. See MPEP § 608.01(b).

The drawings are objected to because of the following: In fig. 1, reference label --122-- needs to be provided; In figs. 4, 5, reference labels (419, 420, 422) need to be provided; In fig. 5, reference labels (418, 421) need to be provided. Correction is required.

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Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, note that the recitation “preferably for use in...” ~~renders~~ the claim vague and indefinite. Note that the recitation “in which branches ... propagate in different directions” is vague and indefinite since it is disclosed that the different direction can not be for all branches. In other words, certain branches propagate in a particular direction while certain other branches propagate in a direction different from the particular direction. Clarification is needed.

In claims ~~1~~, 2, note that reference to “the (other/waveguide) branch” is not definite since it is unclear which one branch is respectively intended.

In claims ~~4-9, 10~~, note that it is unclear how the “apertures” (recited herein) relate to the earlier recited “at least one aperture” (e.g. same as, different from etc.).

The following claims have been found objectionable for reasons set forth below:

In claim ~~4~~, note that “one and the” should be rewritten as --a-- for a proper characterization.

In claim ~~6~~, “their” should be rewritten as --the-- for a proper characterization. Claims 12-14 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

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Note that the recitation of an antenna arrangement appears to be reciting subject matter which is more comprehensive than the “distribution network” recited in independent claim 1. Accordingly, such more comprehensive subject matter fails to further limit the distribution network of claim 1.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 10, 12 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Goto.

Goto (figs. 1, 2) discloses a electromagnetic signal distribution system comprising at least two waveguide branches (30) having slots or apertures (36) coupled to feeding waveguide (32). Note that adjacent waveguides (30) have an E field propagation direction which are in opposition (as denoted by the opposing arrows). Moreover, note that this overlap results in a group of slots/apertures (36) arranged along a straight line as is evident from fig. 2. Furthermore, note that each branch has a common polarization by virtue of a horizontal E field orientation. Finally, note that the distribution network is usable in slot antenna applications. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

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such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goto in view of Park ('810).

Goto discloses the claimed invention except for the specific polarization of claims 5, 7 (i.e. horizontal or vertical.

Park ('810) exemplarily discloses that by appropriately selecting the type of coupling slots, horizontal or vertical polarization can be respectively effected.

Accordingly, it would have been obvious in view of the references, taken as a whole, to have modified the slot or aperture such as to have effected either horizontal or vertical polarization. Such a modification obviously would have provided the advantageous benefit of permitting the user to effect the desired polarization. Claims 11, 13, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goto in view of Okada.

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Okada discloses in fig. 4, thereof a distribution arrangement similar to that in Goto.

Moreover, Okada (fig. 1b) discloses a physical realization comprising waveguides which are tracks in a conductive layer.

Accordingly, it would have been obvious to have realized the GOTO distribution arrangement as tracks in a conductive material as taught by Acadia (fig. 2). Such a modification would provide the advantages benefit of easier construction have and assembly as compared to the assembly of discrete waveguides in GOTO. Moreover, as an obvious consequence of this modification, an intermediate aperture layer would necessarily been present. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Park ('561) discloses a slot fed distribution arrangement.

Any inquiry concerning this communication should be directed to Benny Lee at telephone number (703) 308-4902.

B. Lee/mm

01/19/02

*Benny Lee*

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JAN 21 2002

Appropriate correction is required.